

WHAT IS CLAIMED IS:

1. A serial communication apparatus for sending and receiving serial data through data signal lines, comprising:

5        buffer means for releasing data signals; and  
      level control means for releasing signal lines at a given timing after the second level retains data signals, if the control signal that instructs the release of data signal to the buffer means is  
10    inputted, when the data signal line indicates the first level by the buffer means.

2. A serial communication apparatus according to claim 1, wherein the serial communication  
15    apparatus uses a three-state buffer as the buffer means, the level control means retains the second level by the three-state buffer, and the three-state buffer is set up in a high-output impedance condition at a given timing after input of control signal.

20

3. A serial communication apparatus according to claim 1, further comprising means for stopping the operation of the level control means.

25        4. A serial communication apparatus according to claim 1, further comprising means for canceling the operation stop of the level control means, on

condition that at least one time of normal communication is made after communication trouble if communication trouble occurred.

5           5. A serial communication apparatus according to claim 1, further comprising means for releasing the data signal line if the data signal line indicates the first level when sending or receiving has ended.

10

6. A serial communication method of sending and receiving serial data through data signal lines, comprising:

15           a first step of retaining data signals at a second level, if a control signal that instructs the release of data signal to a buffer means is inputted, when the data signal line indicates a first level by the buffer means that has also the function of releasing data signals; and

20           a second step of releasing data signals at a given timing after the second level retains data signals in the first step.

25           7. A serial communication method according to claim 6, wherein the serial communication method uses a three-state buffer as the buffer means, and the first step retains the second level by the three-

state buffer, and in the second step, the three-state buffer is set up in a high-output impedance condition at a given timing after input of control signal.

5           8. A serial communication method according to claim 6, further comprising a step of inhibiting the processing by the control step.

10           9. A serial communication method according to claim 6, further comprising a step of canceling the processing inhibition of the control step, on condition that at least one time of normal communication is made after communication trouble if communication trouble occurred.

15

10. A serial communication method according to claim 6, further comprising a step of releasing the data signal line if the data signal line indicates the first level when sending or receiving has ended.